APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Uneven Distribution of Zinc on Sheets During Galvanizing, by [redacted] H. Bablick.

GERMAN, Zeitschrift Metallkunde, 1939.

Brutcher Tr 845

Scientific - Min/Metals $1.10

12,993 [redacted]

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Hot-Rolling of Manganese and Its Deformable Alloys, by W. Kroll, 2 7 pp.

GERMAN, per, Z fur Metallkunde, Vol XXXI, No 1, 1939, pp 20-23.

SLA 60-14620

Sci
Feb 62
Vol III, No 11

184,692

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Impact Bending Strength of Zinc Alloys at Low Temperatures, by K. Bayer, A. Burkhardt, 4 pp.

GERMAN, per, Zeitschrift fur Metallkunde, Vol XXXI, No 5, May 1939, p 131.

SLA Tr 1817 Jan 1957

Sci - Min/Met
Apr 1957

46,298

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

New Data on the Welding and Soldering of Zinc Aluminium and Magnesium, by Karl Heinemann, 5 p.

GERMAN, per, Zeit fur Metallkunde, 1939, Vol XXXI, No 5, pp 141-143.

SLA 59-20357

Sci
Mar 60
Vol 2, No 12

109182

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Electric Welding of Copper-Clad Steel Sheet, by W. Lessel, 8 pp.

GERMAN, por, Z Metallkunde, Vol XXXI, No 5, May 1939, pp 143, 144.

SLA 2665

Sci - Min/Met, Engr

58,447

Feb 58

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Recovery and the Recrystallization of Cold Worked Nickel, by H. Miller, 34 pp.

GERMAN, per, Z Metallkunde, Vol XXXI, No 6, Jun 1939, pp 161-167.

SLA 57-121

Sci - Min/Met

58,431

Feb 58

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Effect of Annealing on Electrolytic Nickel, by W. Koster, 13 pp.

RUSSIAN, per, Z Metallkunde, Vol XXXI, No 6, 1939, pp 168-170.

SLA 57-722

Sci - Minerals/Metals
Oct 57

54,257

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Superposition of Cold Hardening and Precipitation Hardening of Iron-Nickel-Copper Permanent Magnet Alloys, by O. Dahl, 36 pp.

GERMAN, per, Z Metallkunde, Vol XXXI, Jun 1939, pp 192-203.

SLA 2131

Sci - Minerals/Metals
Oct 57

54,044

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Production of Aluminium Cable Sheath, by
Walter Daisinger, 8 p.

GERMAN, per, Zeit fur Metall, 1939, Vol XXXI,
No 9, pp 305-310.

SLA 59-20359

Sci
Mar 60
Vol 2, No 12

109,099

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Recrystallization Textures of Face-Centered Iron-Nickel-Copper Alloys, by Horst Guido Muller, 12 pp.

GERMAN, per, Zeitschrift fuer Metallkunde, Vol XXXI, No 10, 1939, pp 322-325.

SLA 59-15205

Sci
Dec 59
Vol 2, No 4

103,095

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Chromium Plating with Special Reference to Black Chromium Plating, by K. Arndt, H. Endrass, 11 pp.

GERMAN, per, Z. Metallkunde, Vol XXX, Jan 1938, pp 21-24.

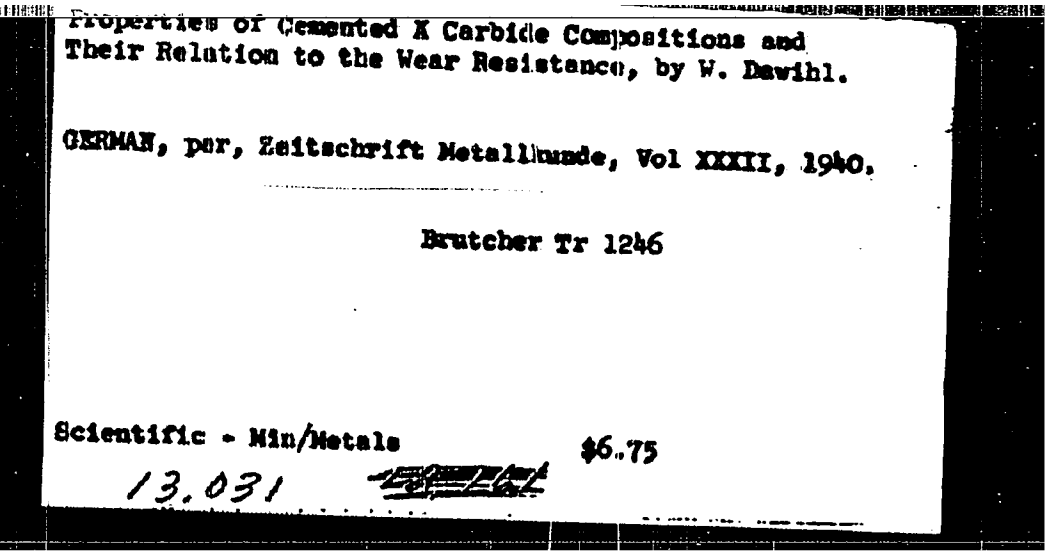
SLA Tr 57-635

53,329

Sci - Min/Met
Sep 57

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



Properties of Cemented K Carbide Compositions and Their Relation to the Wear Resistance, by W. Dawihl.

GERMAN, per, Zeitschrift Metallkunde, Vol XXXII, 1940.

Brutcher Tr 1246

Scientific - Min/Metals $6.75

13.031

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

(FDD 23331)

On Alloys of Germanium With Bismuth, Antimony, Iron, and Nickel, by K. Huttweit, G. Masing, 38 pp.

GERMAN, per, Zeitschrift fuer Metallkunde, Vol XXXII, No 3, Mar 1940, pp 52-61.

CIA/FDD/U-6820

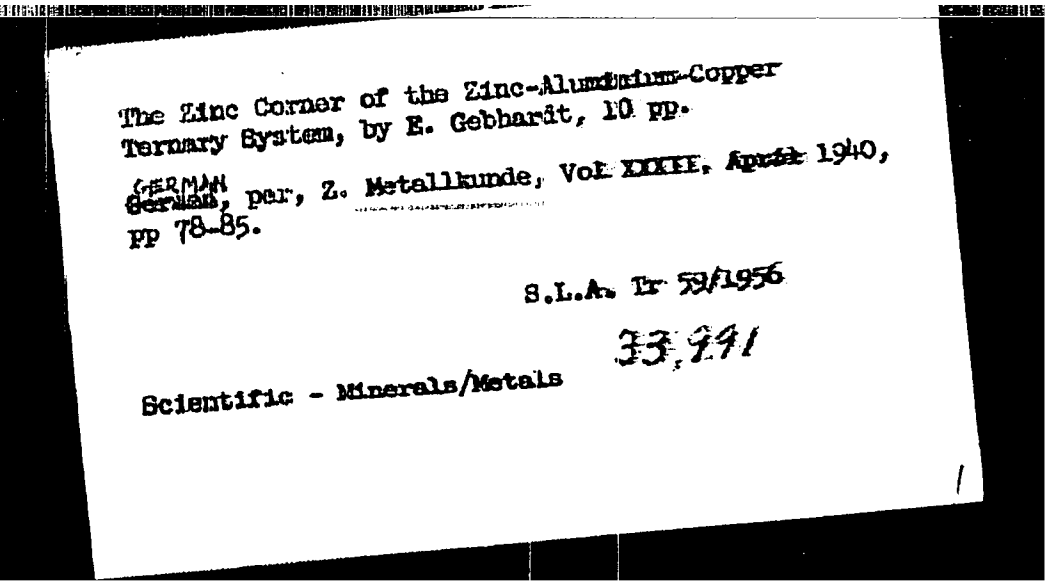
S.L.A. 575

Germany
Scientific - Minerals/Metals, metallurgy, alloys

21,771 CTS 64/Jan 55

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



The Zinc Corner of the Zinc-Aluminum-Copper Ternary System, by E. Gebhardt, 10 pp.

GERMAN
German, per, Z. Metallkunde, Vol XXXIII, April 1940, pp 78-85.

S.L.A. Tr 59/1956

33,991

Scientific - Minerals/Metals

1

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Anodic Corrosion in Lead Accumulators, by H. Buckle, H. Hanemann, 5 pp.

GERMAN, per, Z. für Metallkunde, Vol XXXII, 1940, pp 120-122. 9031694

ACSIL Tr 1138

Sci - Chem

175, 165

Dec 51

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Investigation of the Time Sequence of Umklapp-processes in Metals, by T. Forster, E. Scheil. 21pp.
UNCLASSIFIED

Forester

GERMAN, per. Z. Metallk., Vol XXXII, No 6, 1940, pp 165-173.

SLA TT 62-20231
385
A.E.R.E., HARWELL 11/3/5/
OT/TGS
764

Scientific - Min/Metals

April 54 CTS/DEX
11,568

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Schneider, Armin and Esch, Udo.
ON THE REACTIONS BETWEEN MAGNESIUM AND SULFUR DIOXIDE (Über die Reaktionen Zwischen Magnesium und Schwefeldioxyd). [1963] [21]p. (foreign text included) 13 refs.
Order from SLA $2.60 63-18134

Trans. of Zeitschrift für Metallkunde (Germany) 1940, v. 32, no. 6, p. 173-177.

DESCRIPTORS: *Magnesium, *Sulfur compounds, *Dioxides, Casting, Chemical reactions.

(Metallurgy--Nonferrous Metals, TT, v. 10, no. 11)

63-18134

I. Schneider, A.
II. Esch, U.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

A Measuring Device for the Rapid Determination of Magnetic Magnitudes, by F. Forster, 18 pp.

GERMAN, per, Z. Metallkunde, Vol XXXII, No 6, Jun 1940, pp 184-190.

SLA 57-2440

SLA 62-1816/1

Sci

Aug 58

69, 848

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

A Method of Measuring the Temperature Relationship of the Electrical Resistance and the Specific Heat of Metals in the Solid and the Fluid State, by F. Forster, G. Tschentke.

GERMAN, per, Z Metallik, Vol XXXII(6), Jun 1940, pp 191-195.

TPA3/TIB Tr No T 3993

Scientific - Electronics, temperature, resistance heat, metals, solid, fluid

Index Aeronauticus

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Magnetic Anisotropism in Rolled Iron-Nickel Alloys, by H. Conradt, O. Dahl, K. Sixtus, 23 pp.

GERMAN, per, Z Metallkunde, Vol XXXII, No 7, Jul 1940, pp 231-238.

SLA 2176

Sci - Minerals/Metals
Oct 57

54,042

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

An Apparatus for Rapid Determination of Magnetic Values, by F. Forster, 10 pp.
GERMAN, per, Zeitschrift, fur Metallkunde, Vol 32, No 8, 1940, pp 184-190. 9227279
ACSII/64/475

Sci - M/M
May 65

380,362

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Behavior of Zinc Toward Sodium Chloride Solution and Sea Water Under Atmospheric Conditions, by G. Schikorr, 12 pp.

GERMAN, per, Z Metallkunde, Vol XXXII, No 9, Sep 1940, pp 314-317.

SLA Tr 1923

Sci - Minerals/Metals
Sep 57

54, 011

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Diffusion of Mg in Al with Varying Degrees of Purity, by W. Bungardt.
GERMAN, per. Z. Metallkde., 32, 1940, pp 360-362.
*NBS TT 70-57329

Sci-Mat
Aug 70

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Properties of Cemented Carbide Compositions and Their Relation to the Wear Resistance (Written Discussion), by C. Ballhausen.

GERMAN, per, Zeitschrift Fur Metallkunde, Vol XXXII, No 9, 1940, pp 365.

Brutcher Tr 1684

Scientific - Min/Metals

$1.65

12,955

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

General and Specific Properties of Different Types of Electrodeposited Zinc-Coatings, by Hellmut, Heldegarde Barmann, 10 pp.
Fischer
GERMAN
Ger, per, Z. Metallkunde, Vol XXXII, November 1940, pp 376-383.

S.I.A. Tr 52/1956

Scientific - Minerals/Metals 33,389

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Intercrystalline Corrosion of Zinc Alloys, by Greta Petrich, Wolf Wolf, 4 pp.

GERMAN, per, Z. Metallkunde, Vol. XXXII, Dec 1950, pp 412-414.

S.L.A. Tr No 483/1955

Sci - Minerals/Metals
Jan 1957 CRB/dex

45, 855

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Recrystallisation-Temperatures of Commercial Zinc Alloys, by George Masing, H. J. Wallbaum, 2 pp.

GERMAN
Germany, per, Z. f. Metallkunde, Vol XXXII, December 1940, p 418.

34,011

S.L.A. Tr 101/1956

Scientific - Chemistry, Minerals/Metals

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Influence of Iron Content on the Working Properties of Zinc Alloys, by Hermann Kastner and Ernst Fischer, 4 & pp.

GERMAN
Germany, per, Z. Metallkunde, Vol. XXX, August-September 1941.

S.L.A. Tr 85/1956
34,000

Scientific - Minerals/Metals, Physics

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Shape of the Cooling Curves, by
G. Masing.
GERMAN, per, Zeitschrift fur Metallkunde,
Vol 33, No 1, 1941, pp 36-37. 9232373
AEC NP-Tr-1352

Sci/MGM
May 66

299,800

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Magnetic Investigations of Internal Stresses. 1. Internal Stresses in the Stretching of Nickel Wire, by Fritz Forster, Kury Stamske, 17 pp. UNCLASSIFIED

GERMAN, per, Z. Metallkunde, Vol XXXIII, 1941, pp Ex 98-104.

AEC Tr 1938

EEur - Germany
Scientific - Min/Metals

17,403

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Magnetic Investigations of Internal Stresses,
1. Internal Stresses in Die-Drawn Nickel Wire,
by Fritz Forster, Kurt Stambke, 22 pp. UNCLASSIFIED

GERMAN, per, Z. Metallkunde, Vol XXXIII,
1941, pp 104-114.

AEC Tr 1939

Eur - Germany
Scientific - Min/Metals

17,396

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Destruction of Materials by Cavitation, by Theo. Rutenbeck.

GERMAN, Zeitschrift Fur Metallkunde, Vol 33, No 4, April 1941, pp 145-152.

USA Corps of Engr, Waterways Exper Sta Tr 43-16

Sci - Engineering, hydraulics, naval
Econ - Transportation, river, water

Available on loan at Research Center Library

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Simplest Principle in the Crystal Chemistry of Alloys, by U. Dehlinger, G.E.R. Schulze.

GERMAN, per, Z Metallk, Vol XXXIII, 1941, pp 157-160.

Associated Electrical Industries, Ltd
Tr No T/442 OT/178

Scientific - Chemistry, crystal, alloys

Index Aeronauticus

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Schweizerhof, Sigfrid.
HOMOGENEOUS COOLING STRESSES IN PLATED MATERIALS. [1962] 35p. 4 refs.
Order from SLA $3.60 • 62-14785

Trans. of Zeitschrift für Metallkunde (West Germany) 1941, v. 33, no. 4, p. 168-175.

DESCRIPTORS: *Magnetic materials, Metals, Sheets, *Plating, Annealing, Temperature, Elasticity, Stresses, *Thermal stresses, Iron alloys, Nickel alloys.

(Metallurgy, TT, v. 8, no. 4)

62-14785

1. Schweizerhof, S.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Schweizerhof, Sigfrid.
A NEW MULTILAYER MATERIAL WITH RECTILINEAR MAGNETIZATION CURVE. [1962] 47p.
24 refs.
Order from SLA $4.60 62-14786

Trans. of Zeitschrift für Metallkunde (West Germany) 1941, v. 33, no. 4, p. 175-185.

DESCRIPTORS: *Magnetic materials, Materials, Magnetic properties, Physical properties, Magnetostriction, Permeability, Heat treatment, Stresses, Elasticity, Sheets, Nickel alloys, Iron alloys, Plating, Magnetic cores, Alloys.

(Physics--Magnetism, TT, v. 8, no. 4)

62-14786

1. Schweizerhof, S.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Conradt, H. W., Dahl, O., and Sixtus, K.
MAGNETIC ANISOTROPISM IN ROLLED IRON-NICKEL ALLOYS (Magnetische Anisotropie in Gewalzten Eisen-Nickel-Legierungen). [1962] [23]p. 9 refs.
Order from SLA $2.60 62-18169

Trans. of Zeitschrift für Metallkunde (Germany) 1940, v. 32 [no. 7] p. 231-238.

DESCRIPTORS: *Nickel alloys, *Iron alloys, Rolling mills, Deformation, Crystal structure, Magnetic fields, Heat treatment, Elasticity, Stresses, Single crystals, Rotation, Conductivity, Magnetostriction, Magnetic properties, Intensity.

In nickel iron alloys, cold rolling leads to a strongly preferred magnetic direction in the direction of rolling. Heating, even below the initiation of recrystallization, eliminates the rolling anisotropy; in this way there was made possible a complete division of the total anisotropy (Metallurgy, TT, v. 9, no. 4) (over)

62-18169

I. Title: Anisotropy
I. Conradt, H. W.
II. Dahl, O.
II. Sixtus, K.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Concerning the Synthesis and the Volume Changes of Zinc-Copper-Aluminum Alloys III. Survey of the Course of Equilibrium in the Copper-Aluminum-Zinc System, by Werner Koster, 26 p.

GERMAN, per, Zeit fur Metallkunde, 1941, Vol Vol XXXIII, No 8/9, pp 289-296.

SLA 59-17830

Sci
Feb 60
Vol 2, No 10

108,912

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Structure and Changes of Volume of Zinc-Copper-Aluminum Alloys, IV. The Causes of the Volume Changes and a Method for Achieving Constancy of Dimension, by Erich Gebhardt, 24 p.

GERMAN, per: Zeitschrift fur Metallkunde, 1941, Vol XXXIII, No 8/9, pp 297-305.

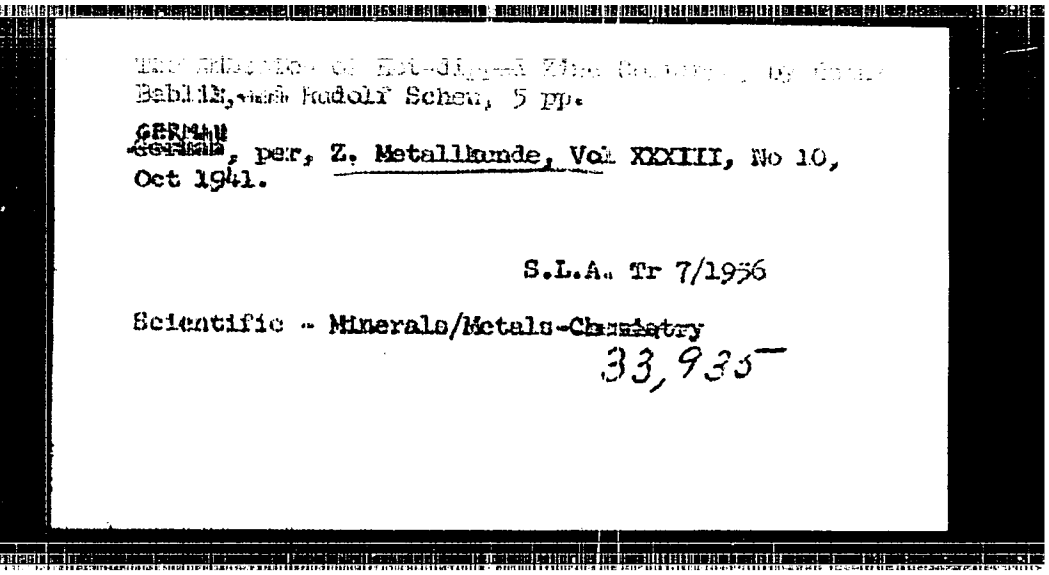
SLA 59-1.7829

Sci
Feb 60
Vol 2, No 10

108,910

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



[illegible] Babl[illegible] and Rudolf Schen, 5 pp.

GERMAN
~~German~~, per, Z. Metallkunde, Vol XXXIII, No 10, Oct 1941.

S.L.A. Tr 7/1956

Scientific - Minerals/Metals-~~Chemistry~~

33,935

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Zinc-Cerium and Zinc-Lanthanum Systems, by Jakob Schramm (Stuttgart), 5 pp.

GERMAN, per. Zeit fuer Metallkunde, Vol XXXIII, 1941, pp 358-360. 9209187

AEC-Tr-5678

Sci - Mat & Met

Jul 63

236,168

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Three-Component System Nickel-Cobalt-Aluminum,
by Jakob Schramm, 28 pp.
GERMAN, per, Zeit fur Metallkunde, No 12, 1941,
pp 403-412.
Patent Office

Sci - Chem
Oct 64

268,089

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Processes in Metal Structure Subjected to Tensile and Alternating Loading, by A. Thum, C. Petersen, 17 pp.

Full translation.

GERMAN, per, Zeits.fur Metallkunde, Vol XXIV, No 2, Feb 1942, pp 39-46.

S.L.A.

Scientific - Minerals/metals

27,223 Aug 55

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Diffusion of Carbon in Alloy Steels, by W. Seith, F. Hartbehat, 11 pp.

GERMAN, per, Z Metallkunde, Vol XXXIV, 1942, pp 125-130.

AEC Tr IGRL-T/C-82

Sci - Chem

Sep 58

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Temperature Dependence of the Solubility of Lead in Solid Silver Above the Eutectic Temperature, by E. Raub and A. Plzanek-Wittek, 11 pp.

GERMAN, per, Z. Metallkunde, Vol XXXIV, 1942, pp 93-96.

FLA Tr 57-2080

Sci

Jul 58

68,015

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Determination of the Probable-Damage Line of an Al-Cu-Mg Wrought Alloy, by F. Bollenrath, H. Cornelius

Full translation.

GERMAN, per, Z. Metallk, Vol XXXIV, No 7, Jul 1942, pp 150-156.

TPA3/TIB Tr No T-4081

S.L.H.

Scientific - Minerals/Metals
Index Aeronautics
Jun 53 CTS/DEX

2315

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Diffusion of Fe and Al and the Formation of Intermetallic Phases, by W. Seith.
GERMAN, per. Z Metallkde, No 35, 1943, pp 242-245.
*NBS TT 70-57479

Sci-Mat
Aug 70

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Laminar Corrosion in Aluminium Alloys, by F. Bollenrath, W. Bungardt

GERMAN, par, Z. Metallk., Vol 34, No 7, pp 160-165, Jul 1952.

TPA3/TIB Tr No T 4044

Scientific - Minerals/Metals
Ministry of Supply, TPA3/TIB/P & TD, Leysdown Road, Nottingham, London, S.E.9

1334

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Results of Investigations on Eutectic Zinc Alloys; by Weiss E. Blumenthal, and E. Hanemann, 2 pp.

GERMAN
~~German~~, per, Z.Z. Metallkunde, Vol XXXIV, September 1942, p 221.

S.L.A. Tr 15/1956

Scientific - Minerals ~~and~~ Metals

33,939

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Contribution to the Fatigue Bending Strength of Rolled Zinc and of Zinc Alloys, by F. Erdmann-Jesnitzer, H. Hanemann, J. Kohlmeyer. 8 pp.

GERMAN, per, Z. für Metallkunde, Vol XXXIV, No 7, 1942 pp 222-224.

S.L.A.

Scientific - Minerals/Metals

24,802

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Crystal Structures of Ni_5Ce, Ni_5La, Ni_5Ca, Cu_5La, Cu_5Ca, Zn_5La, Zn_5Ca, Ni_2Ce, $MgCe$, $MgLa$ and $MgBr$, by Hans Nowotny, 21 pp.

GERMAN, per, Z Metallkunde, Vol XXXIV, [illegible]
1942, pp 247-253.

S.L.A. Tr 1022/1956

Sci - Chemistry

39,240

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Stress Corrosion Behavior of Several Aluminum-Zinc-Magnesium Alloys After Artificial Aging, by Walter Rungardt, Gunther Schaitberger, 31 pp.

GERMAN, per, Z fur Metallkunde, Vol XXXV, No 2, 1943, pp 47-55.

SLA 60-14360

Sci
Feb 62
Vol III, No 11

184,691

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Problem of the Strengthening Effect of Latent Elastic Stresses, by G. Masing, 6 pp.

GERMAN, per, Z. Metallkunde, Vol XXXV, Jan 1943, p 56.

SLA 58-687

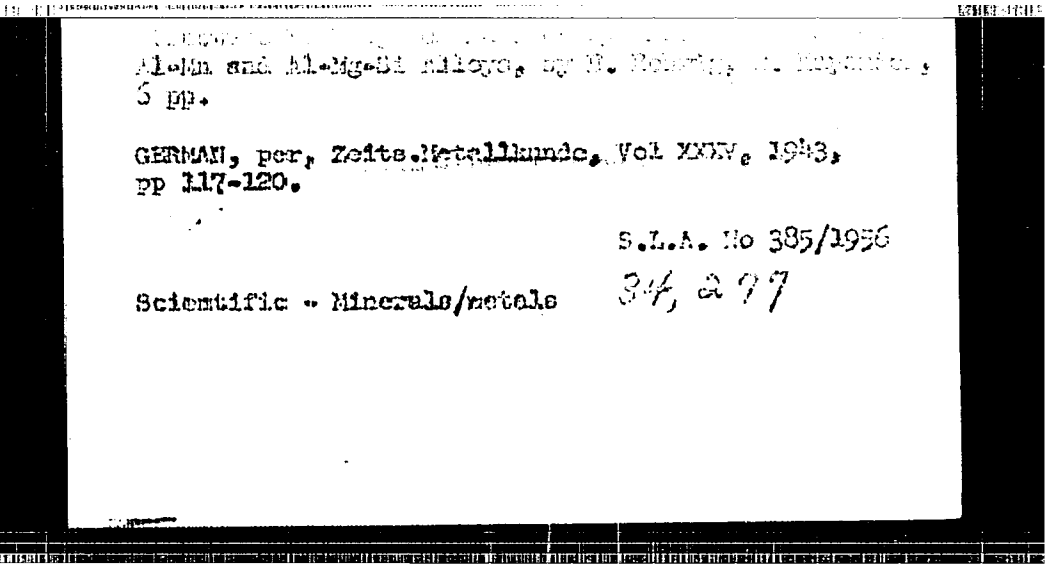
Sci

Aug 59

95, 671

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



Al-Mn and Al-Mg-Si alloys, by H. [illegible]
5 pp.

GERMAN, per, Zeits.Metallkunde, Vol XXXV, 1943,
pp 117-120.

S.L.A. No 385/1956

Scientific - Minerals/metals 34, 277

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Resistance of Zinc to Atmospheric Corrosion, by Gerhard Schikorr, Ina Schikorr, 17 pp.

GERMAN, per, Zeitschrift fuer Metallkunde, Vol XXXV, Sep 1943, pp 175-181.

S.L.A. Tr 600/1955

Sci - Min/Met
Apr 1957 CTS/dex

30,234

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Theory of Degassing of Liquid Metal by Scavenging, by W. Geller, 18 pp. UNCL

GERMAN, per, Z Metallkunde, Vol XXXV, No 11, 1943, pp 213-217.

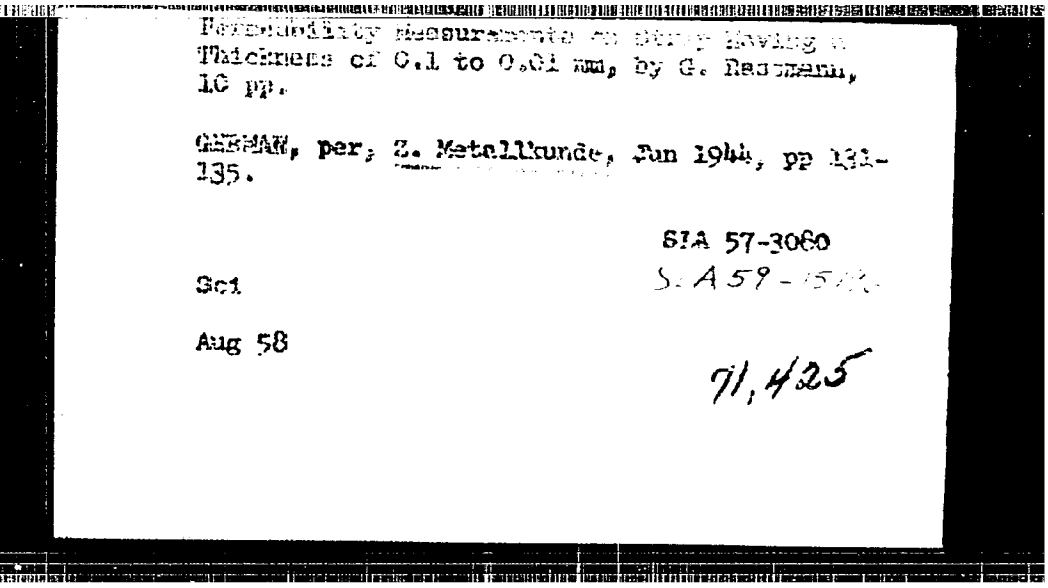
Apply for loan:

Atomic Energy Research Establishment
Apply through Science Library,
South Kensington, London.

May 59

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



Permeability measurements on [illegible] having a Thickness of 0.1 to 0.01 mm, by G. Naumann, 10 pp.

GERMAN, per; Z. Metallkunde, Jun 1944, pp 131-135.

STA 57-3080

S. A 59 - 15[illegible]

Sci

Aug 58

71,425

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Investigations With Porous Sintered Alloys on a Copper Base, by Hermann Unckel,

GERMAN, per, Z Metall, Vol XXXVI, 1944, pp 164-169.

AEC Tr-4019

Sci - Phys

May 60

117,374

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Relationship between Dimensional Changes of Metal and Powders and their Properties, by K. Daehl and W. Eisx, 14 pp.

GERMAN, per, Z. Metallkunde, Vol XXXVI, No 8, 1944, pp 197-200. (Loan Copy Only).

SLA 57-3001

Sci

Aug 58

11,416

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Diffusion Behaviour of Rare Metal Platings, Part I, by H. Buckle, 13 pp.

GERMAN, per, Z. fuer Metallkunde, Vol XXXVII, No 1, 1946, pp 47-52.

CSIRO

Sci - Min/Met
May 62

196,422

OTS 62-11411
SLA 63-20972

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Bückle, Helmut.
STRUCTURE AND MICRO-HARDNESS OF BINARY AND TERNARY SYSTEMS OF COLUMBIUM, TANTALUM, MOLYBDENUM AND TUNGSTEN.
[29 Sep 47] [7p] 1ref
Order from SLA $1.10 TT-63-20971

Trans. of [Zeitschrift fur Metallkunde] (West Germany) 1946 [v. 37, no. 1/2] pp. 53-56. (Abstract available)

DESCRIPTORS: *Powder metallurgy, Sintering, *Tungsten alloys, *Molybdenum alloys, *Tantalum alloys, *Niobium alloys, Hardness, Microstructure, Phase studies,

A high vacuum sintering installation for maximum temperatures is described for the manufacture of sintered bodies from high-melting metals. Tungsten, molybdenum, columbium and tantalum, as well as their binary and ternary alloys were prepared in the
(Metallurgy--Nonferrous Metals, TT, v. 11, no. 5)
(over)

TT-63-20971

I. Bückle, H.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Effect of Air on Liquid Zinc, by Erich Gebhardt, 13 pp.

GERMAN, per, Zeits fuer Metallkunde, Vol XXXVII, 1946, pp 87-96.

S. L. A. Tr 595/56

Sci - Min/Met

38,344

Aug 56 CTS/dex

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

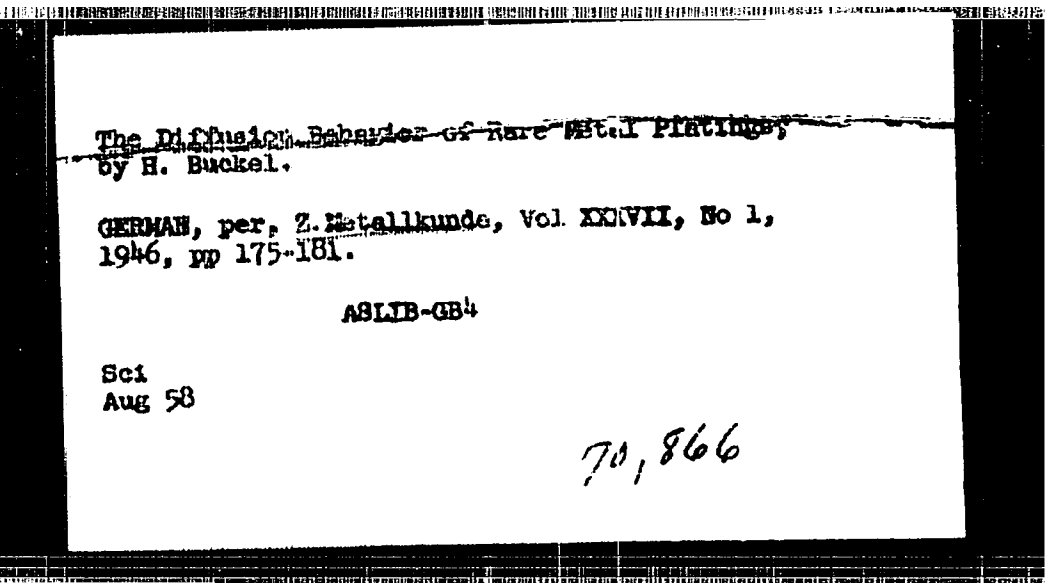
APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Diffusion Studies in Multiphase Alloys, by H. Buckle.
GERMAN, per, Z. Metallkde, Vol 37, 1946, pp 175-181.
*NTIS/USDC/NBS TT 71-55044
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



The Diffusion Behavior of Rare Metal Platings, by H. Buckel.

GERMAN, per. Z. Metallkunde, Vol. XXXVII, No 1, 1946, pp 175-181.

ASLIB-GB4

Sci
Aug 58

70,866

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Nowotny, Hans.
THE CRYSTALLINE STRUCTURE OF Cu_2Te. [1953] 5p. (figs. refs. omitted).
Order from SLA $1.10 63-18433

Trans. of [Zeitschrift für Metallkunde] (West Germany) 1946, v. [37] [no. 1/2] p. 40-42.

DESCRIPTORS: *Copper alloys, *Tellurium alloys, Crystal structure, Crystal lattices, Phase studies, Microstructure

(Metallurgy--Structural, TT, v. 10, no. 11)

63-18483
I. Nowotny, H.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

X-Ray Stress Measurements With Steels Possessing Different Carbon Contents and Different Carbon Contents and Different Structures, by Franz Bollenrath, Viktor Hauk, 14 p.

GERMAN, per, Zeit fur Metallkunde, 1946, Vol XXXVII, No 6, pp 161-167.

SLA 59-2058

Sci
Apr 60
Vol III, No 2

113, 590

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Buckle, H.

DIFFUSION BEHAVIOR OF NOBLE METAL CLADDING II. 20 Dec 48, 10p. (figs. formulae omitted). Order from: SLA $1.10 62-18497

Trans. of [Zeitschrift für Metallkunde] (West Germany) 1946 [v. 37, no. 6] p. 175-181.

DESCRIPTORS: *Rare earth elements, *Metals, Aluminum, Silver, Zinc, Cadmium, *Diffusion, Penetration, Crystal structure, Heating, Curve fitting.

A new index is suggested for the diffusion behavior of claddings. It is shown mathematically that the curve d = f(t) as a rule is a parabola. After prolonged periods of heating, it may be approximated by its tangent. The penetration depths at various temperatures on the silver side are determined for the pairs of metals Ag/Al, Ag/Zn and Ag/Cd. In the pair of metals Ag/Zn, a swelling of the intermediate layers formed (Metallurgy--Structural, TT, v. 9, no. 4) (over)

62-18497

1. Buckle, H.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Study of the Diffusion of Some Elements in Metals,
by J. Hauk.
GERMAN, per. Z Metallkde, Nos 37-38, 1946-47,
pp 49-55.
*NBS TT 70-57521

Sci-Mat
Aug 70

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Fröhlich, K. W.
CONTACT MATERIALS WITH A SILVER BASE.
5 Jan 49, 6p. (figs. tables omitted).
Order from SLA $1.10
62-18377

Trans. of [Zeitschrift für Metallkunde] (West Germany) 1947 [v. 38] no. 1, p. 29-32.

DESCRIPTORS: •Silver alloys, Physical properties, Hardening, Silicon alloys, Nickel alloys, Tungsten alloys, Iron alloys, Zinc alloys, Powder metallurgy.

The applicability of pure silver as a contact material is limited by its softness, its tendency to stick, its relatively low melting point and its sensitivity to filming by sulfur. These four factors cause, according to the conditions of switching, [illegible] plastic deformation, sticking, burning (i.e. actually spitting) of the contact material and contact resistance. To harden silver for
(Metallurgy--Nonferrous Metals, TT, v. 9, no. 1)
(over)

62-18377

I. Fröhlich, K. W.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Structure of Galvanic Alloy Deposits. IV. Silver - Cadmium Alloys, by Ernst x Raub, Bernhard Wullhorst, 34 pp.

GERMAN, per, Z Metallkunde, Vol XXXVIII, 1947, pp 33-41.

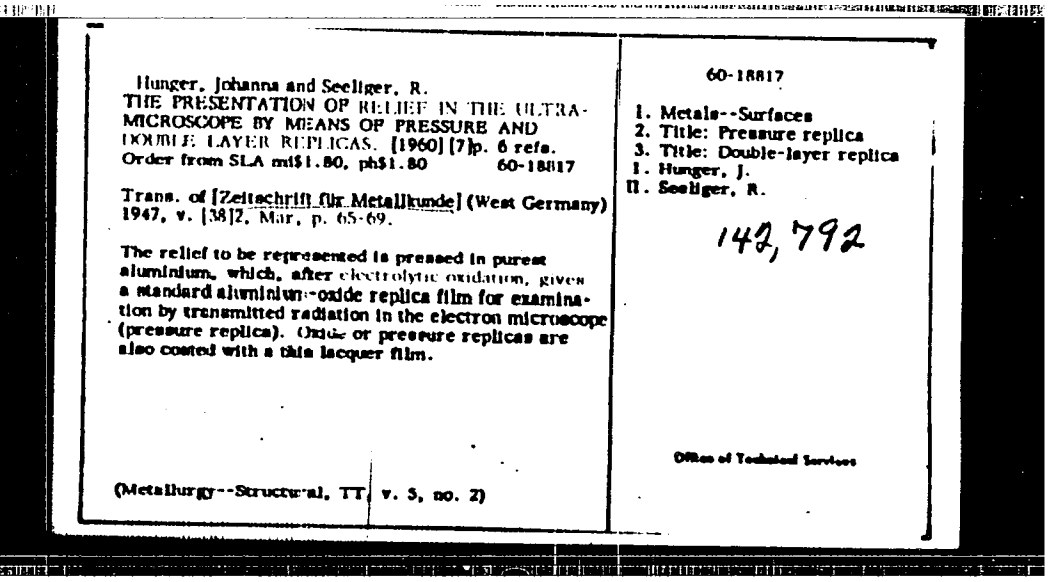
AEC Tr-4521

Sci
Jun 61

157,744

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



Hunger, Johanna and Seeliger, R.
THE PRESENTATION OF RELIEF IN THE ULTRA-MICROSCOPE BY MEANS OF PRESSURE AND DOUBLE LAYER REPLICAS. [1960] [7]p. 6 refs.
Order from SLA mi$1.80, ph$1.80 60-18817

Trans. of [Zeitschrift für Metallkunde] (West Germany) 1947, v. [38]2, Mar, p. 65-69.

The relief to be represented is pressed in purest aluminium, which, after electrolytic oxidation, gives a standard aluminium-oxide replica film for examination by transmitted radiation in the electron microscope (pressure replica). Oxide or pressure replicas are also coated with a thin lacquer film.

(Metallurgy--Structural, TT, v. 5, no. 2)

60-18817

1. Metals--Surfaces
2. Title: Pressure replica
3. Title: Double-layer replica
I. Hunger, J.
II. Seeliger, R.

142,792

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Contribution to the Problem of Ingo Segregation, by E. Scheil.

GERMAN, per, Z. fur Metallkunde, Vol XXXVIII, pp 69-75.

ASLIB GB 1

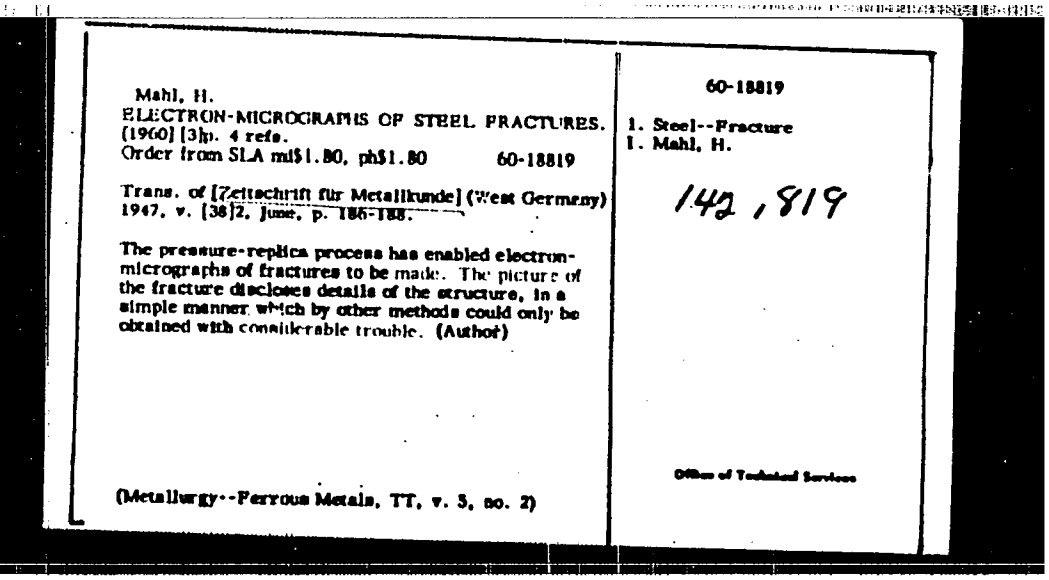
Sci - Min/Met

Apr 62

192, 737

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2



Mahl, H.
ELECTRON-MICROGRAPHS OF STEEL FRACTURES.
[1960] [3]p. 4 refs.
Order from SLA mi$1.80, ph$1.80 60-18819

Trans. of [Zeitschrift für Metallkunde] (West Germany)
1947, v. [38]2, June, p. 186-188.

The pressure-replica process has enabled electron-micrographs of fractures to be made. The picture of the fracture discloses details of the structure, in a simple manner which by other methods could only be obtained with considerable trouble. (Author)

(Metallurgy--Ferrous Metals, TT, v. 3, no. 2)

60-18819

1. Steel--Fracture
I. Mahl, H.

142,819

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Graf, L.
STRESS CORROSION OF HETEROGENEOUS ALLOYS. 9 May 49. 10p. (figs. refs. omitted).
Order from SLA $1.10 62-18376

Trans. of [Zeitschrift für Metallkunde] (West Germany) 1947 [v. 38, no. 7/8] p. 207-212.

DESCRIPTORS: *Alloys, *Corrosion, *Stresses, Sensitivity, Electrochemistry, Phase studies, Crystal structure.

(Metallurgy--Corrosion, TT, v. 9, no. 4)

62-18376

1. Graf, L.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Note on the Reactivity of Water Vapor and Hydrogen Peroxide With Light Metals at Higher Temperatures, by Oswald Kubaschewski, Hans Ebert, 7 pp.

GERMAN, per, Z. Metallkunde, Vol. XXXVIII, 1947, pp 232-235.

AEC Tr 2413

Sci - Minerals/Metals, Chemistry

32,488

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Study of the Ferromagnetic Transition Temperature as A Function of Composition, by W. Gerlach.
GERMAN, per, Z. Metallkde, Vol 38, 1947, pp 275-280.
*NTIS/USDC/NBS TT 71-55049
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Reactions of Molten Zinc-Aluminum Alloys With Solid Iron, by E. Gebhardt, I. Schmidt

GERMAN, per, Zeitschrift fur Metallkunde, Vol XXXIX, No 11, 1947, pp 321-325.

Brutcher Tr 3128

Scientific - Minerals/Metals
CTS/DEK

Price $6.90

5922

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Temperature Dependence of the Elastic Modulus of Some Pure Metals, by W. Koster. GERMAN, per, Z. Metallkde., Vol 39, 1948, pp 1-9.
*NTIS/USDC/NBS TT 71-55058
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Köster, W.
ELASTICITY MODULUS OF PURE METALS AS A FUNCTION OF THE TEMPERATURE. 15 Feb 49, 10p. (figs. tables, refs. omitted).
Order from SLA. 11. 10 62-18402

Trans. of Z[eit]s[chrift] f[ür] Metallkunde (West Germany) 1948 [v. 39, no. 1] p. 1-9.

DESCRIPTORS: Temperature, *Metals, *Elasticity, Melting, Measurement, Vibration mechanisms.

The modulus of elasticity and its temperature dependence were measured for 32 very pure metals from -180° up to the melting point or up to about 1000° with the aid of the determination of the natural frequency of transversely vibrating bars.

(Metallurgy, TT, v. 9, no. 3)

62-18402

1. Köster, W.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Köster, W.
ON A SPECIAL PHENOMENON IN THE TEMPERATURE COURSE OF THE MODULUS OF ELASTICITY AND DAMPING OF METALS SUCH AS Cu, Ag, Al AND Mg. 3 Mar 49, 5p. (figs. tables refs. omitted).
Order from SLA $1.10 62-18403

Trans. of Zeits[chrift] f[ür] Metallkunde (West Germany) 1948, v. 39 [no. 1] p. 9-12.

DESCRIPTORS: *Magnesium, *Aluminum, *Silver, *Copper, *Damping, *Elasticity, Temperature.

The temperature dependence of the modulus of elasticity and the damping of Cu, Ag, Al and Mg were determined. These four metals show, over an extensive temperature range, an unexpected lowering of the modulus of elasticity and an increase of damping. The height at which the bulge of the curve occurs depends on the degree of purity of the metals. The phenomenon is therefore due to
(Metallurgy, TT, v. 9, no. 3) (over)

62-18403

1. Köster, W.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Hardening of Iron-Zinc and Cobalt-Zinc Alloys,
by J. Schramm, A. Mohrnheim.
GERMAN, per, Z fuer Metallkunde, Vol XXXIX, No 3,
1948, pp 71-78.
BISI 3614

Sci - M/M
May 64

258,896

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Köster, W. and Rauscher, W.
RELATIONSHIPS BETWEEN THE MODULI OF ELASTICITY OF BINARY ALLOYS AND THEIR STRUCTURE. 17 Mar 49, 12p. (figs refs. omitted)
Order from SLA $1.60 62-18404

Trans. of Z[ei]s[chrift] f[ür] Metallkunde (West Germany) 1948 [v. 39, no. 4] p. 111-120.

DESCRIPTORS: *Alloys, *Crystal structure, Eutectics, Intermetallic compounds, *Elasticity, Lattices, Phase studies, Chemical bonds.

A comprehensive review is given with respect to the concentration dependence of the modulus of elasticity of binary alloys. An investigation was made of continuous mixed crystal series, limited mixed crystal series, eutectic alloy series and alloys with intermetallic phases. The most important structural systems were (Metallurgy--Structural, TT, v. 9, no. 2) (over)

62-18404

I. Köster, W.
II. Rauscher, W.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Etudes magnetiques et electriques de barreaux fritted de nickel-carbonyle, by W. Gerlach, J. Von Rennenkampf, et al, 27 pp.
GERMAN to FRENCH, per, Z fuer Metallkunde, Vol XXXIX, 1948, p 130.

Reverse Translation
CEA-A-1554

Sci
Sep 64

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Jellinghaus, W.
THE MAGNETIZATION PROCESS IN THE CASE OF IRON-NICKEL-ALUMINIUM-COBALT-AND COPPER-MAGNET ALLOYS WITH A PREFERRED DIRECTION. 25 Apr 59, 8p. (figs. tables omitted).
Order from SLA $1.10 62-18351

Trans. of Zeits[chrift] f[ür] Metallkunde (West Germany) 1948, v. 39, no. 2, p. 52-56.

DESCRIPTORS: *Magnetic alloys, Copper alloys, Cobalt alloys, Aluminum alloys, Nickel alloys, Iron alloys, Heat treatment, Magnetic fields, *Magnets, *Magnetism.

Starting with a completely non-magnetic state, internal magnetization curves are obtained with small fields which with amplitudes of less than H_c in the preferred direction, show less magnetization than in the trans-
(Metallurgy, TT, v. 9, no. 2) (over)

62-18351

I. Jellinghaus, W.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Jesnitzer, F. E.
THE EFFECT OF THE WELDING TIME IN SPOT WELDING OF ALUMINIUM ALLOYS. 29 Mar 50, 16p. (figs. tables omitted) 19 refs.
Order from SLA $1.60 62-18350

Trans. of Zeitschrift für Metallkunde (West Germany) 1948 [v. 39, no. 10] p. 303-312.

DESCRIPTORS: *Aluminum alloys, *Spot welding, Spot welds, Welded joints, Electrodes, Time.

Weld seams on single-notched spot-welds produced with various periods of welding and intensities of welding current, using six different aluminium-magnesium alloys, have been investigated with respect to strength and structure. Accordingly, with long welding times of 20, 30 and more cycles duration (corresponding to 1/3, 1/2 and more seconds), weld seams were obtained
(Metallurgy, TT, v. 9, no. 2) (over)

62-18350

I. Jesnitzer, F. E.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Phase Boundaries in Binary Metallic Systems, by Ortrud von Goldbeck, 10 pp.

GERMAN, per, Z Metallkunde, Vol XXXIX, 1948, pp 213-216.

S.L.A. Tr 1064/1956

Sci - Minerals/Metals

39,256

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Diffusion in Metals, by O. Kubaschewski.
GERMAN, per, Z. Metallkde., Vol 39, 1948,
pp 216-228.
*NTIS/USDC/NBS TT 71-55063
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

III. The Oxidation Mechanism of Metals and Alloys, by Oswald Kubaschewski, 6 pp.

GERMAN, per, Z. Metallk, Vol XXXIX, 1948, pp 218-220.

AEC Tr 2410

Sci - Minerals/Metals, Chemistry

Apr 56

33,267

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Wellinger, Karl and Hofmann, Artur.
TESTING METALLIC MATERIALS IN THE COLD.
[26 Sep 49] [18p] 19refs
Order from SLA $1.60c TT-63-20830

Trans of Z[eitschrift für] Metallkunde (West Germany) 1948, v. 39, no. 8, p. 233-239.

DESCRIPTORS: *Aluminum, *Aluminum alloys, *Magnesium alloys, *Manganese alloys, Low temperature research, Tests, *Tensile properties, Mechanical properties, Crystallization.

(Metallurgy--Light Metals, TT, v. 11, no. 4)

TT-63-20830

I. Wellinger, K.
II. Hofmann, A.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Rolling Texture of Zinc and Zinc Alloys and Its Influence on the Working Properties Especially the Deep-Drawing Characteristics, by W. Hofman, B. Trautmann.

GERMAN, per, Z Metallkunde, Vol XXXIX, No 10, 1948, pp 293 — 303.

Alum Lab, Ltd, Tr OT/1598

Sci - Min/met
Aug 57

51, 341

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Information on the Manganese-Bearing Structurel Constituent in Industrial Aluminium Alloys, by H. J. Seeman, M. Dudek, 2 pp.

GERMAN, per, Zeit fuer Metallk, Vol XXXIX, Oct 1948, pp 319-320.

S.L.A. Tr 527/56 37,112

Sci - Minerals/Metals

Aug 1956

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

~~The~~ Grain Coloration Etching and Batch Etching on Aluminum-Copper-Magnesium Alloys, by H. Kostron, 5 pp.

GERMAN, per, Z Metallkunde, Vol XXXIX, No 8, 1948, pp 333-342.

SLA 2308

Sci - Minerals/Metals
Oct 57

54,027

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

On the Modification of Aluminium-Silicon Alloys. UNCL

GERMAN, per, Z Metallkunde, Vol XL, Jan 1949, pp 24-29.

British Iron and Steel Ind
(no number given)

Sci - Min/Met
Sep 59

98,386

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

A Study of the Oxidation of Ni-Cr Alloys, by
L. Horn.
GERMAN, per, Z. Metallkde., Vol 40, 1949, pp 73-76.
*NTIS/USDC/NBS TT 71-55053
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Equilibrium Studies in the Zinc-Aluminium and Zinc-Aluminium-Copper Systems, by Erich Gebhardt, 16 pp.

GERMAN, per, Z Metallkunde, Vol XL, 1949, pp 136-140.

AIC MP Tr-540

Sci - Min/Met
May 61

150,372

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Effect of Titanium Content of Steel in Hot Dip Galvanizing, by H. Bablik, F. Hotzl, R. Kukaczka.

GERMAN, per, Zeitschrift Fur Metallkunde, Vol XL, 1949, pp 176-179.

Brutcher Tr 2364

Scientific - Min/Metals $3.85

12,978

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Fahlenbrach, H. and Sixtus, K.
INVESTIGATIONS OF VARIOUS NON-MAGNETIC STATES. [1962] 12p. (refs. figs. tables omitted). Order from SLA $1.60 62-16992

Trans. of Zeitschrift für Metallkunde (West Germany) 1949, v. 40, no. 5, p. 187-193.

DESCRIPTORS: *Ferromagnetic materials, Iron alloys, Nickel alloys, Silicon alloys, Aluminum alloys, Alloys, Nickel, *Magnetism, Permeability, Phase transitions, Wire, Resistance, Vibration, Single crystals, Magnetic materials.

(Physics--Magnetism, TT, v. 8, no. 10)

62-16992

I. Fahlenbrach, H.
II. Sixtus, K.

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

The Behaviour of Compacted Binary Mixtures of Gold and Silver Powders on Sintering With Other Metallic Powders, by Ernest Raub, Werner Plate, 19 pp.

GERMAN, per, Zeit fuer Metallk, Vol XL, No 6, 1949, pp 206-214.

A.E.R.E. Harwell
Tr 563

Sci - Minrals/Metals,metallurgy. 32,924
Apr 56

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Concerning the Solubility of Chromium, Vanadium, Titanium, Manganese, and Zirconium in Aluminum Alloys, by G. Siebel, 4 pp.

GERMAN, per, Z Metallkunde, Vol XL, 1949, pp 214-217.

Tr
SLA 2196

Sci - Minerals/Metals
Oct 57

54, 033

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Gerlach, Walther.
HETEROGENEOUS PRECIPITATION IN THE GOLD-NICKEL SYSTEM. [1961] [28]p. 3 refs
Order from SLA $2.60 61-18317

Trans. of Zeitschrift f[ür] Metallkunde (West Germany) 1949, v. 40, no. 8, p. 281-289.

DESCRIPTORS: *Gold, *Nickel, *Alloys, *Crystals, Precipitation, Decomposition, Temperature, Magnetic properties

The decomposition of supersaturated gold-nickel mixed crystals is analyzed quantitatively and with respect to time for four compositions with 77.50, 26.5 and 14.5 at.-% Ni. The nickel-rich end phase does not occur immediately in its final form. Probably regions still richer in gold (up to 8%) are precipitated first, going over into the normal composition 98-99% Ni, 1-2% Au (Chemistry--Physical, TT, v. 6, no. 9) (over)

61-18317

1. Gerlach, W.

135439

Office of Technical Services

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2

Experimental Problems in The Study of Diffusion in Polycrystals of the Systems Al-Cu and Al-Ag, by H. Jagodzniki.
GERMAN, per, Z. Metallkde., Vol 40, 1949, pp 296-305.
*NTIS/USDC/NBS TT 71-55055
Available NBS Only

May 71

APPROVED FOR RELEASE: Thursday, May 16, 2002 CIA-RDP84-00581R000401250031-2